Corps of Engineers, New Orleans District Modified Charleston Method (MVN MCM) Comment/Response Document

1. The MCM requires a higher amount of mitigation than previous CEMVN methods and may require up to 18:1 Mitigation to Impact Ratios, ultimately reducing development and halting public works, critical infrastructure and coastal restoration and protection projects.

   Response: CEMVN recognizes that in some instances, the mitigation ratios for the MCM will be higher than that of the WVA; however, in some instances the ratios will be lower than that of the WVA. There is no agreement among the scientific community as to an appropriate amount of mitigation to compensate for wetland impacts. Assessment methods document the process by which the amount of compensation is determined. The amount of mitigation required by the Charleston method, which is carried over into the MCM, is based on ratios that have been adopted and used by other Corps districts. These ratios produce values greater than one to one for higher quality wetlands as available science has shown that restored wetlands do not provide all the same functions, services and values as those of fully functioning mature wetland systems.

   Several comments noted that the MCM requires between 12:1 and 18:1 for impacts to marsh. CEMVN has been unable to duplicate such results without selecting variables in the MCM model that would be considered inappropriate mitigation options, such as a mitigation project constructed on the east side of the state to mitigate for impacts on the west side of the state.

   Action: CEMVN will include a narrative in the MCM Guidebook that clarifies the fact although some options exist, they would not be considered appropriate unless all other potential options were exhausted, etc.

2. MCM should require less mitigation for public works, critical infrastructure and coastal restoration and protection projects.

   Response: CEMVN is required by 33 CFR Part 332.3(a) to provide compensatory mitigation that offsets environmental losses from unavoidable impacts to waters of the United States resulting from issuance of Department of the Army (DA) permits. The permit evaluation establishes whether a proposed project is in the overall public interest. 33 CFR 320.4(a)(1) states that "The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the

national concern for both protection and utilization of important resources." 33 CFR 320.4(r) addresses how mitigation is incorporated into this balancing process. "Consideration of mitigation will occur throughout the permit application review process and includes avoiding, minimizing, rectifying, reducing, or compensating for resource losses. Losses will be avoided to the extent practicable. Compensation may occur on-site or at an off-site location. Mitigation requirements generally fall into three categories.
(i) Project modifications to minimize adverse project impacts should be discussed with the applicant at pre-application meetings and during application processing. As a result of these discussions and as the district engineer's evaluation proceeds, the district engineer may require minor project modifications. Minor project modifications are those that are considered feasible (cost, constructability, etc.) to the applicant and that, if adopted, will result in a project that generally meets the applicant's purpose and need. Such modifications can include reductions in scope and size; changes in construction methods, materials or timing; and operation and maintenance practices or other similar modifications that reflect a sensitivity to environmental quality within the context of the work proposed. For example, erosion control features could be required on a fill project to reduce sedimentation impacts or a pier could be reoriented to minimize navigational problems even though those projects may satisfy all legal requirements (paragraph (r)(1)(ii) of this section) and the public interest review test (paragraph (r)(1)(iii) of this section) without such modifications.
(ii) Further mitigation measures may be required to satisfy legal requirements. For Section 404 applications, mitigation shall be required to ensure that the project complies with the 404(b)(1) Guidelines. Some mitigation measures are enumerated at 40 CFR 230.70 through 40 CFR 230.77 (Subpart H of the 404(b)(1) Guidelines).
(iii) Mitigation measures in addition to those under paragraphs (r)(1) (i) and (ii) of this section may be required as a result of the public interest review process. (See 33 CFR 325.4(a).) Mitigation should be developed and incorporated within the public interest review process to the extent that the mitigation is found by the district engineer to be reasonable and justified. Only those measures required to ensure that the project is not contrary to the public interest may be required under this subparagraph."

Several comments noted that coastal restoration projects should not be required to provide compensatory mitigation. By definition, projects determined to have an overall positive effect on the natural environment do not require compensatory mitigation. For example, large scale marsh construction projects may have short-term adverse impacts to emergent marsh through construction of retention dikes and/or equipment tracking on marsh to lay discharge pipes and also have adverse impacts to fisheries resources through dredging and deposition activities. However, the benefits of establish marsh on these spoil areas will produce long-term beneficial effects for these resources that outweigh the adverse impacts. Projects where benefits cannot be demonstrated may be required to compensate for unavoidable impacts. CEMVN is unaware of any DA permits issued that required compensatory mitigation for coastal restoration projects.

Action: The MCM Guidebook and Workbook will remove reference to the Beneficial Alteration Factor in the Dominant Impact Factor selection list on the Impact sheet.

3. The MCM was developed from the Charleston Method and cannot be applied to the coastal systems in Louisiana.

   Response: The Charleston Method is a conditional assessment methodology that considers the perceived values of an impact site based on its habitat/hydrologic type and quality versus the perceived functional lift of mitigation project site based on its mitigation type (restoration/enhancement). While the weighting of the factors of the Charleston Method remain generally unchanged, the factor definitions in the MCM have been modified to account for the habitat and hydrologic conditions of the New Orleans District. The factor modifications were completed during a thorough modification and review process conducted by a federal and state resource agency review team having jurisdiction within the New Orleans District and extensive expertise in the natural environments in this region.

   Action: None required.

4. The MCM should contain a text box location to include narrative discussions on rationale for selecting factors.

   Response: The MCM does contain a comment box on the upper right hand corner of the Impact and Mitigation Sheets. The user may enter any comments in those boxes as desired.

   Action: CEMVN has provided a separate Comments Worksheet where the user can enter general comments as well as specific comments for each factor selection.

5. MCM Guidebook should not state the cost of mitigation can be determined, rather the scale of mitigation can be determined.

   Response: CEMVN agrees that it does not regulate the cost of compensatory mitigation provided by a mitigation bank.

   Action: CEMVN will change the language utilized in MCM Guidebook accordingly.

6. The MCM should provide a rationale for the factor weighting.

   Response: The factor weighting is based on ratios that have been considered acceptable amounts to fully compensate for impacts to aquatic resources. The factor values modify the ratios based on circumstances at the impact and mitigation project site. The values given to the factors have been extensively tested and reviewed by a federal and state resource agency review team having jurisdiction within the New Orleans District and extensive expertise in the

natural environments in this region. CEMVN is unaware of any proven scientific methodology available to test the factor values within the MCM.

Action: None required.

7. The MCM should give a higher Net Improvement value for marsh restoration projects due to the amount of work required.

   Response: The values within the MCM are based upon the amount of perceived increase in aquatic functions provided by a mitigation work type (re-establishment > rehabilitation > enhancement). Although the amount and cost of the work required for marsh re-establishment is greater than any other mitigation type within the New Orleans District, the increase in aquatic functions is similar to that of forested system re-establishment. Marsh habitats are given slightly higher values in the MCM when considering the Temporal Lag factor. Additionally, as stated in several comments, marsh systems erode at a high rate, resulting in a much shorter project life, which in turn reduces the value of the aquatic functional lift from marsh restoration projects.

   Action: None required at this time, marsh restoration projects already receive slightly higher values with the Temporal Lag factor.

8. The MCM should not utilize the Cumulative Impact Factor.

   Response: CEMVN is required by 33 CFR Part 320.4(a) to consider cumulative impacts in its public interest review. Cumulative impacts are defined by the National Environmental Policy Act as the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future impacts regardless of what person or agency undertakes such other action. CEMVN is unaware of any proven scientific method for assessing cumulative impacts for a project. The cumulative impact factor in the MCM has been extensively considered by a federal and state resource agency review team having jurisdiction within the New Orleans District and extensive expertise in the natural environments in this region.

   Action: During the development of the MCM, the cumulative impact factor in the Charleston Method was analyzed and was determined to have an extreme effect on the acreage requirement. CEMVN, with interagency assistance, determined the best course of action was to lower the cumulative impact factors for low, medium, and high by a factor of 10. CEMVN acknowledges the cumulative impact factor can require higher amount of mitigation than is typically required, but only for those projects with large acreage impacts that are considered to have potentially high cumulative impact as determined through the DA permit process. CEMVN cannot justify further alteration of the cumulative impact factor at this time.

9. The current MCM gives lower mitigation values for Enhancement than previous versions.

Response: By definition enhancement does not result in an increase of wetland acreage but only an increase to some functions associated with a wetland type. Often the benefits associated with enhancement are perceived and result in a tradeoff, producing adverse impacts to one species assemblage and habitat to produce future long-term benefits/improvements for another. CEMVN acknowledges that the MCM has undergone modifications from the initial model release. Upon further review of values initially given to enhancement, we reduced the amount of mitigation attributable to some forms of enhancement based on the functional lift attributable to them. Future MCM modifications could occur if deemed necessary as use and/or advances in restoration science warrant them. CEMVN also acknowledges that some of the factor values in the MCM 2012 roll out will also change from previous versions.

Action: CEMVN will provide the public with updated versions of the MCM on the New Orleans District webpage and RIBITS.

10. The MCM should not penalize a mitigation project site due to the existence of a mineral lease.

Response: The review of banking proposals considers both the potential for long lasting benefits and conditions that may adversely affect restoration/enhancement activities Active mineral leases alert us to the potential of future impacts and the loss of mitigation credits. Active wells on site have other environmental risks associated with them that may affect the ability to restore old well sites and adjacent properties. As part of the MCM review process, CEMVN has reconsidered its evaluation of all the negative influences on a mitigation project site. The negative influence factors have been updated to simplify the definitions. CEMVN recognizes that it allows for the exploration and production of minerals in its banking instruments as well as in the conservation servitude. CEMVN also acknowledges that the chances for a 'wildcat' well to be drilled in a random location may be as great as on a property with a lease, as such a lease only provides for who may actually conduct the exploration and production activity.

Action: CEMVN has modified the oil and gas activities negative influence factor to consider the existence of wells (active or abandoned) on the mitigation project site.

11. The MCM should be placed on a longer public notice process as the end users were not included in the development of the MCM.

Response: Development of the MCM began in 2006. The MCM, originally submitted to the public as the Impact Compensation Assessment Technique, was placed on public notice in 2006 and has been under review by CEMVN since that time.

Action: None required.

12. The MCM should not increase mitigation ratios until more options for mitigation are available.

Response: CEMVN is currently working on several mitigation banks across the New Orleans District. At this time, the majority of each major watershed in the New Orleans District contains at least one mitigation bank. In addition, any applicant may propose a permittee responsible mitigation plan option should one be available and environmentally preferable to a mitigation bank option.

Action: None required. Mitigation banking is undertaken by private entities regulated by CEMVN, not established by CEMVN. The responsibility for providing compensatory mitigation lies upon the applicant requesting DA permit authorization.

13. An independent review of the MCM's economic impact should be completed.

Response: CEMVN does not have the resources to conduct such an economic impact study at this time.

Action: None required.

14. The MCM Guidebook should include a revision date.

Response: CEMVN agrees the MCM Guidebook should include a revision date.

Action: The MCM Guidebook already contains a revision version. CEMVN will include a revision version and date on both the Guidebook and Workbook.

15. The MCM should allow impacts to functions to be quantified.

Response: The MCM is a conditional assessment methodology that considers the perceived values of an impact site based on its habitat/hydrologic type and quality versus the perceived functional lift of mitigation project site based on its mitigation type (restoration/enhancement). CEMVN needed a method that would provide a quick assessment of impacts and mitigation requirements to fully compensate for those impacts, require minimal amount of field data collection and would have repeatable, consistent results among interdisciplinary project managers, agencies and the regulated public.

Action: None required.

16. The MCM should provide credit for preservation on site.

Response: 33 CFR Part 332 does allow for preservation as a mitigation type; however, the mitigation site must meet certain criteria to be utilized as mitigation credit. CEMVN does allow for the use of preservation on mitigation project sites, such use is limited in the MCM to ten percent of the total acreage of a mitigation project placed under conservation servitude and

only provides value to contiguous restoration or enhancement acreage. CEMVN is still considering how to incorporate preservation into the MCM as a mitigation type.

Action: None required at this time. CEMVN will continue to consider preservation as a mitigation type if a project is presented in conformance with 33 CFR Part 332. The utilization of preservation on site referred to in these comments was related to acreage that is more part of the avoidance and minimization process of mitigation.

17. The MCM factor definitions including Priority Category, Habitat Category, Hydrology Category, and the Cumulative Impact Factor should be clarified.

    Response: CEMVN acknowledges that the definitions of the factors utilized in the MCM can always be improved. In regards to the cumulative impact factor, CEMVN recognizes that including specific examples of projects that would receive a high or medium cumulative prior to such projects review through the DA permit process may be premature.

    Action: CEMVN will update the habitat and hydrology factor definitions to clarify their intent. CEMVN will remove examples of projects defined under the cumulative impact factor as it is premature to assume such findings prior to the DA permit process.

18. The Location Factor provides a higher value for mitigation projects located on or adjacent to the impact site, which is contrary to the preference provided in 33 CFR Part 332.

    Response: CEMVN acknowledges that 33 CFR Part 332 requires the use of a watershed approach and places a preferential hierarchy on the utilization of mitigation banks as opposed to permittee responsible mitigation plans. The MCM is a tool that is utilized to determine compensatory mitigation requirements, not a tool to determine the appropriateness of a mitigation bank or a permittee responsible mitigation plan. CEMVN acknowledges that should a permittee responsible mitigation plan be chosen, it would be based upon its environmental benefit to the watershed, but no greater benefit to a watershed than expected of a mitigation bank.

    Action: CEMVN will modify the list of location factors to Zone 1, 2 and 3. Zone 1 will now include both on site and adjacent or mitigation bank within the same primary service area of the impact.

19. The MCM Guidebook reference to RGL 02-02 should be removed as 33 CFR Part 332 now supersedes RGL 02-02.

    Response: CEMVN acknowledges that 33 CFR Part 332 supersedes RGL 02-02.

    Action: CEMVN will remove reference to the RGL 02-02 from the Guidebook.

20. Several districts already use a modified Charleston Method, CEMVN should utilize nomenclature for this assessment method specific to the New Orleans District.

    Action: CEMVN will rename the MCM to the MVN MCM.

21. The MCM places the impact location and kind values on the Restoration/Mitigation Bank tab which prevents users to calculate the true total of MCM credits available at a mitigation project site.

    Response: CEMVN acknowledges the type and location factors have presented difficulty for users, primarily mitigation bank sponsors, to calculate the total mitigation credit located at a project site.

    Action: CEMVN will not make any changes regarding the kind and location factors at this time.

22. The MCM should utilize Rehabilitation for pine savanna restoration projects rather than Enhancement.

    Response: The MCM currently utilizes rehabilitation for pine savanna restoration when hydrologic restoration is required. Pine savanna is given enhancement credit when no hydrologic manipulation is required.

    Action: None required.

23. Introducing fire to a site should not be considered negatively as it was a natural process.

    Response: CEMVN does not consider the act of fire a negative influence on the site. The value related to fire management stems from the fact that in order for the mitigation project to be successful, some act of management must occur by human forces which otherwise may not occur. This factor accounts for the potential the site may not be managed and as such may end up becoming unsuccessful.

    Action: None required.

24. Pine savanna restoration temporal lag should be lowered to 5 – 7 years.

    Response: From CEMVN's experience, the temporal lag currently assessed for pine savanna mitigation projects of 10 – 20 years is the appropriate value. While it may be possible to achieve success for a pine savanna restoration project in 7 years, it is not typical and may only occur on sites which require little management to restore pine savanna characteristics.

    Action: None required.

25. Suggest requiring mitigation areas even larger than 500 acres.

Response: CEMVN agrees that larger mitigation projects are more beneficial for the environment and certainly provide for ease of management in fire dependant systems; however, limiting the required size of a mitigation project to 500 acres would greatly reduce the amount of mitigation proposals within the New Orleans District. The MCM provides for a greater value to those sites that are larger in size, with those above 500 acres receiving the greatest amount of credit.

Action: None required.